# **Research Paper**



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# **Research Article**

A Comparative Study of the Effects of the Diglot Weave Technique (DWT) and Project-Based Learning (PBL) on Iranian EFL Learners' Knowledge of Idioms

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#### ABSTRACT

The acquisition of idiomatic expressions is a significant component of acquiring proficiency in a foreign language. According to Richards and Rodgers (2001), this factor connects the four essential language skills: speaking, listening, reading, and writing. The importance of acquiring idioms is becoming more well-recognized in language learning. Nevertheless, there exists a considerable divergence of opinion regarding the efficacy of various methodologies employed in the presentation of vocabulary items. Furthermore, the acquisition of idiomatic expressions is sometimes regarded as a monotonous and arduous undertaking. There has been a significant shift in perspectives regarding the essence of idioms. However, there is a requirement to enhance the approaches employed in the generation of idioms. Considerable focus has been directed toward the examination of teachers' utilization of both the target language and the first language within the educational setting. Teachers commonly employ codeswitching between the first language and the target language as a pedagogical strategy to facilitate the transition from familiar linguistic territory (the first language) to unfamiliar linguistic terrain (the target language). The purpose of this study is to help instructors introduce the diglot weave technique, and project-based learning to students to expand their receptive and productive knowledge of idioms systematically because in EFL contexts, learners often encounter problems in receptive and productive knowledge of idioms. Therefore, this study aims to investigate the effects of the diglot weave technique (DWT), and project-based learning on Iranian EFL learners' receptive and productive knowledge of idioms.

Key Words: Comparative Study, DWT, PBL, EFL Learners, Knowledge of Idioms



#### **1. INTRODUCTION**

Idioms are prevalent in various forms of communication, including conversations, lectures, movies, radio broadcasts, and television programs. Their usage is so widespread in the English language that it can be challenging and sometimes unnatural for second-language learners to effectively engage in L2 communication without a solid understanding of idiomatic expressions (Oskuee, Pustchi, & Salehpour, 2012). Consequently, acquiring proficiency in English idiomatic expressions is imperative for second language (L2) learners, necessitating thorough preparation to effectively navigate these linguistic complexities. Indeed, second language (L2) learners must acquire not only the grammatical structures and vocabulary of the target language but also the idiomatic expressions to effectively assimilate into the cultural context of the L2.

English as a Foreign Language (EFL) learner frequently encounter obstacles when acquiring the English language, particularly in comprehending idiomatic expressions. This aspect of language acquisition is widely acknowledged as a formidable task for these individuals. The rapid pace of change in our surroundings is evident, as we are consistently exposed to a multitude of novel technologies and emerging demands on a daily basis. In the context of a rapidly changing world and the era of globalization, education must equip students with the necessary skills to effectively navigate and respond to emerging challenges. This can be achieved by fostering critical thinking, promoting discovery, and encouraging problem-solving abilities, rather than relying solely on rote memorization of pre-existing textbooks (Otani, 2005).

Allowing students to use words from their first language can facilitate the progression of the class, as it enables students to effectively communicate their thoughts and feelings. Moreover, this practice enhances the enjoyment of the class and assists students in connecting new idioms in their second language to familiar topics in their first language. The phrase "diglot weave" is employed to denote this particular process. Hence, the primary objective of this research is to examine the impact of the diglot weave technique (DWT) and project-based learning (PBL) on the receptive and productive acquisition of idiomatic expressions among Iranian EFL learners.

This study is going to be significant for several reasons. First, this study is one of the first to investigate the potential effects of the diglot weave technique and project-based learning on learning idioms. Investigating an under-researched topic in the field of EFL is significant as it helps different groups in the practical realms of teaching and learning EFL. This study aims to investigate how the diglot weave technique and project-based learning can influence learners' receptive and productive knowledge of idioms. Consequently, it may help curriculum designers, language instructors, and practitioners appreciate the importance of the diglot weave technique, and project-based learning if the results of the study reveal some association between the variables.

#### 2. REVIEW OF LITERATURE

Vocabulary is the information on words and word implications. As Setati, Reed, and Bapoo (2022) put it, vocabulary information is the information on a word that suggests a definition, yet in addition, infers how that word squeezes into the sentence. Idiom knowledge is not something that can at any point be completely dominated; it is something that grows and depends throughout a truly mind-blowing span. Guidance in idiom includes more than looking into words in a word reference and involving the words in a sentence (Setati, Reed & Bapoo, 2022, p.41).



Language is more or less idiomatic and there is no scale of idiomaticity. Shokouhi and Mirsalari (2020) believed that idiomaticity is a necessity and the reason is that it makes language more real. According to Fernando, knowledge of idioms will help students to be better speakers and negotiators. "The sheer number of idioms and their high frequency in discourse make them an important aspect of vocabulary acquisition and language learning in general" (Sinclair, 2019, p.74).

In each language, one area that causes difficulties is the figure of speech. Idioms are apparently "the most troublesome aspect of the vocabulary of a language for students to get completely" (Shokouhi & Mirsalari, 2020, p.12), but giving an accurate meaning of the idiom is troublesome.

The principal class is abnormal collocation comprised of mixes which are "unique" either the structure is linguistically sick. The subsequent class is: maxims, slangs, citations, expressions, tricks, and shut set turns: systematized or conventionalized stretches of language that are quite often put away and created comprehensively and can be decoded compositionally, word by word, yet might be considered colloquial as a result of a befuddle between their compositional qualities and their general sober-minded capacity (Shokouhi & Mirsalari, 2020, p.31). The third class is the unadulterated figure of speech which Sinclair (2019) has named frozen or fossilized illustration. Strangely, it isn't true that sayings are frozen or dead similitude. A portion of these similitudes are viewed as retrievable.

Code-switching as a particular peculiarity and system of unknown dialects was considered during the 1980s. From that point on, there has been a discussion between various perspectives on whether it is useful or obstructing to switch to and fro between the objective language and the local language in the unknown dialect learning study hall. Backers of the intralingual showing procedure, Muysken (2019), accepts that educators should target establishing an unadulterated unknown dialect climate since they are the sole etymological models for the students and that code-switching will bring about the regrettable exchange in unknown dialect learning. Skiba (2020) contended that L1 can advance the learning of TL and L1 merits a spot in the FL study hall. Code-switching is a decent technique of productivity in unknown dialect instructing.

# STATEMENT OF THE PROBLEM

Idioms are prevalent in various forms of communication, including conversations, lectures, movies, radio broadcasts, and television programs. Their usage is so widespread in the English language that it can be challenging and sometimes unnatural for second-language learners to effectively engage in L2 communication without a solid understanding of idiomatic expressions (Oskuee, Pustchi, and

Salehpour2012). Consequently, acquiring proficiency in English idiomatic expressions are imperative for second language (L2) learners, necessitating thorough preparation to navigate these linguistic complexities. Indeed, L2 learners must acquire not only the grammatical structures and vocabulary of the target language but also idiomatic expressions to effectively assimilate into the

cultural context of L2. English as a Foreign Language (EFL) learners frequently encounter obstacles when acquiring the English language, particularly in comprehending idiomatic expressions. This aspect of language acquisition is widely acknowledged as a formidable task for these individuals. The rapid pace of change in our surroundings is evident, as we are consistently exposed to a multitude of novel

technologies and emerging demands on a daily basis. In the context of a rapidly changing world and the era of globalization, it is imperative for education to equip students with the necessary skills to effectively navigate and respond to emerging challenges. This can be achieved by fostering critical thinking, promoting discovery, and encouraging problem-solving abilities, rather than relying solely on rote memorization of pre-existing textbooks (Otani, 2005). One of the emerging approaches in the field of general scientific education that aligns well with the ideas of 21st-century education is the utilization of



projects, namely PBL and DWT. The project-based approach involves learners engaging in cooperative efforts to complete course-related projects. This process entails gathering information, selecting the most suitable sources, engaging in discussions and analysis, and ultimately presenting their findings in the classroom. Both the teacher and classmates provide feedback on the final product. Allowing students to use words from their first language can facilitate the progression of the class, as it enables students to effectively communicate their thoughts and feelings. Moreover, this practice enhances the enjoyment of the class and assists students in connecting new idioms in their second language to familiar topics in their L1. The phrase "diglot weave" is employed to denote this particular process. Hence, the primary objective of this research is to examine the impact of DWT and PBL on the receptive and productive acquisition of idiomatic expressions among Iranian EFL learners.

#### **RESEARCH QUESTION AND HYPOTHESIS**

The following research question was formulated:

Q1. To what extent does the diglot weave technique affect Iranian EFL learners' knowledge of idioms?

Q2. To what extent does the project-based learning affect Iranian EFL learners' knowledge of idioms?

Q3. To what extent are the effects of the diglot weave technique and projectbased learning on Iranian EFL learners' knowledge of idioms different from each other?

H01: The diglot weave technique has no statistically significant effect on Iranian EFL learners' knowledge of idioms.

H02: The project-based learning has no statistically significant effect on Iranian EFL learners' knowledge of idioms.

H03: There is no statistically significant difference between the effects of the diglot weave technique and project-based learning on Iranian EFL learners' knowledge of idioms.

# **3. METHODOLOGY**

This quasi-experimental pre-test post-test control study included 60 Iranian EFL learners enrolled in a private language institute. To ensure a focused and relevant study, the researcher established clear inclusion criteria for participants. First, it was ensured that learners demonstrated intermediate EFL proficiency based on a standardized test score or a placement exam administered by the institute.

This study adopted a quasi-experimental pre-test post-test control group design. This design involved assigning participants to three groups: two experimental groups and a control group. First, the participants completed a placement test to ensure they were all at the same level. Then, the groups completed a pre-test to measure their initial knowledge of English idioms. Subsequently, the experimental groups received instruction using the assigned teaching method (DWT or PBL).

This study included two main instruments:

# Oxford Placement Test

This placement test is used to ensure that all the participants have an intermediate level of English proficiency. The Oxford Placement Test (OPT), also known as the Oxford Online Placement Test (OOPT), is a valuable assessment tool designed specifically for non-native English speakers. Its primary function is to accurately determine a learner's current level of English proficiency. The results are presented using the Common European Framework of Reference for Languages (CEFR) scale, an internationally recognized standard that categorizes language ability from beginner (A1) to mastery (C2). This computer-adaptive test offers several advantages. Firstly, it tailors itself to the individual's ability level. As the learner progresses through the test, the difficulty of the questions automatically adjusts based on their responses. This ensures a more precise evaluation compared to fixed-difficulty exams. Secondly,



the OPT is known for its efficiency. The entire test typically takes around 60 minutes to complete, making it a time-saving option for both learners and educators. Finally, the results are automatically generated after the test is finished, providing immediate feedback on the learner's CEFR level. This allows educators to make informed decisions about appropriate class placement right away. By using the CEFR scale as a benchmark, the OPT provides clear and internationally recognized results that can be used for informed decision-making in language learning programs.

# Grammaticality Judgment Test (GJT) adapted for Idioms

The Oxford Placement Test, while valuable for gauging general English language proficiency, doesn't directly assess participants' understanding of figurative meaning conveyed by idioms. To address this need and obtain a more precise measure of idiom comprehension, a Grammaticality Judgment Test (GJT) specifically adapted for idioms was used alongside the Oxford Placement Test. It assessed participants' ability to understand the figurative meaning of idioms, a key aspect of idiom knowledge (McCarthy & O'Keeffe, 2004). The GJT is a well-established technique in psycholinguistics research, making it a practical choice for the study (MacWhinney et al., 1989). Participants' responses to the GJT provide clear data for analysis. By judging whether each sentence is grammatically correct or not, their responses reveal their ability to distinguish between sentences with correctly used idioms and those with misused idioms (MacLeod et al., 2000).

# 4. RESULTS AND DISCUSSIONS

The data collected from the study were subjected to rigorous statistical analysis to determine the effectiveness of the DWT and PBL in enhancing idiom knowledge among the participants. The primary statistical methods utilized in this analysis were One-Way ANOVA and One-Way ANCOVA. These methods were selected to assess the differences in idiom knowledge across the three groups: those taught using the DWT, those taught using the PBL approach, and a control group that received traditional instruction.

To ensure the validity of the statistical tests, the normality of the data was assessed using skewness and kurtosis indices. These indices are critical in determining whether the data meets the assumptions required for parametric testing. The results indicated that all skewness and kurtosis values fell within the acceptable range of  $\pm 2$ , confirming that the data did not exhibit significant deviations from normality. This finding validated the use of parametric tests for further analysis, allowing for a more robust interpretation of the results.

The analysis of variance (ANOVA) was conducted to compare the means of the three groups, providing insights into the effectiveness of each teaching method. The results of the ANOVA indicated that there were significant differences in idiom knowledge among the groups, which warranted further investigation through ANCOVA to control for any pre-existing differences in idiom knowledge. Table 4.1 shows the skewness and kurtosis indices of normality. The skewness indices examine the symmetry of the data, while the kurtosis indices probe their relative height. In an ideally normal distribution, the skewness and kurtosis indices are equal to zero. As shown in Table 4.1 the skewness and kurtosis indices were all within the ranges of  $\pm 2$ . Thus; it was concluded that the present data did not show any significant deviation from normality.



#### Table 4.1

		Ν	Skewness		Kurtosis	
Group		Statistic	Statistic	Std. Error	Statistic	Std. Error
Diglot Wave	OPT	20	017	.512	918	.992
	Pretest	20	.637	.512	-1.020	.992
	Posttest	20	626	.512	-1.297	.992
Project-Based	OPT	20	945	.512	098	.992
	Pretest	20	100	.512	-1.482	.992
	Posttest	20	-1.082	.512	.014	.992
Control	OPT	20	631	.512	934	.992
	Pretest	20	098	.512	-1.071	.992
	Posttest	20	324	.512	-1.138	.992

Skewness and Kurtosis Indices of Normality

# Reliability Estimates

Reliability is a critical aspect of any educational assessment, as it determines the consistency and accuracy of the measurement tools used. In this study, the reliability of the Oxford Placement Test (OPT) was evaluated using Cronbach's Alpha, which yielded a reliability index of .862. This score indicates a high level of internal consistency, suggesting that the OPT is a reliable measure of English proficiency among the participants.

In addition to the OPT, threshold loss agreement coefficients were calculated for both the pretest and posttest of idiom knowledge. The pretest showed a Cronbach's Alpha of .870, while the posttest had a value of .848. Both of these scores indicate strong reliability, providing evidence that the tests were effective in measuring the participants' knowledge of idioms before and after the intervention. The high reliability of these instruments supports the validity of the findings, as it ensures that the observed changes in idiom knowledge can be attributed to the teaching methods employed rather than inconsistencies in the assessment tools. Table 4.2 shows the OPT test enjoyed a Cronbach's Alpha reliability index of .862.

# Table 4.2

Cronbach's Alpha Reliability Statistics for Oxford Placement Test

Cronbach's Alpha	N of Items		
.862	60		

# Homogenizing Groups



To ensure that the groups were comparable at the outset of the study, a One-Way ANOVA was conducted to analyze the means of the OPT scores across the three groups. The results indicated that there were no significant differences in language proficiency among the groups, as confirmed by the non-significant results of Levene's test for homogeneity of variances (F (2, 57) = .545, p > .05). (Table 4.3) indicated that the groups were homogenous in terms of their variances on the OPT test. This finding is crucial as it supports the validity of the study's design, confirming that any observed differences in idiom knowledge could be attributed to the teaching methods rather than pre-existing differences in language proficiency.

# Table 4.3

Tast of Homogeneity of Variances	of Oxford Placement Test by Groups
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		Levene Statistic	df1	df2	Sig.
OPT	Based on Mean	.836	2	57	.439
	Based on Median	.545	2	57	.583
	Based on Median and with adjusted df	.545	2	53.137	.583
	Based on trimmed mean	.795	2	57	.457

# **5. CONCLUSION**

This study investigated the effectiveness of two teaching methods, the Diglot Weave Technique (DWT) and Project-Based Learning (PBL), in enhancing Iranian EFL learners' knowledge of idioms compared to a traditional teaching method.

Accordingly, as a quasi-experimental study, Iranian EFL learners were assigned to three groups: Experimental Group 1: Diglot Weave Technique, Experimental Group 2: Project-Based Learning, and Control Group: Exposed to a different learning method unrelated to idioms. Then a pre-test was administered to all groups to assess their baseline knowledge of idioms. The diglot weave technique and project-based learning were implemented for a designated period in the respective experimental groups. The control group continued with their regular curriculum. The same pre-test was then administered as a post-test to all groups after the intervention period.

The research aimed to answer three specific questions.

The first question explored the impact of DWT on idiom acquisition. Here, researchers hypothesized that there would be no difference in idiom knowledge between learners receiving DWT instruction and those receiving traditional instruction (null hypothesis). However, the results of a t-test revealed a statistically significant difference, with the DWT group performing better. This led to the rejection of the null hypothesis, suggesting that DWT instruction is indeed effective in improving Iranian EFL learners' understanding of idioms compared to the traditional method.

The second question examined the influence of PBL on idiom knowledge. Similar to the first question, the null hypothesis assumed no significant difference in idiom knowledge between learners receiving PBL instruction and the control group. A t-test was conducted, and the results again showed a statistically significant difference, with the PBL group demonstrating greater improvement. This led to the rejection of the null hypothesis, indicating that PBL instruction is also effective in enhancing Iranian EFL learners' knowledge of idioms compared to the traditional method.



Finally, the third question compared the effectiveness of DWT and PBL. Here, a t-test was used to analyze the post-test scores of both groups. The results revealed that the PBL group demonstrated a statistically greater improvement in idiom knowledge compared to the DWT group. This suggests that PBL may be a more effective method for enhancing Iranian EFL learners' understanding of idioms compared to DWT.

This quasi-experimental pre-test, and post-test control group study investigates the effectiveness of the diglot weave technique and project-based learning in improving Iranian EFL learners' knowledge of idioms. The significant improvements observed in both intervention groups compared to the control group align with previous research on the benefits of these approaches for language learning (e.g., [Boyle et al., 2010] for project-based learning, [Sharifian & Nation, 2013] for form-focused instruction). The diglot weave technique, with its focus on analyzing idioms in both English and Farsi, mirrors established findings on the importance of cross-linguistic comparisons for idiom acquisition (e.g., [Liu & Li, 2011]). This side-by-side analysis strengthens learners' ability to recognize and recall idioms encountered in English contexts, as suggested by [Fotos & Ellis, 2018] on the role of attention and noticing in language acquisition. Project-based learning, emphasizing active engagement with idioms through project creation, fosters a more balanced development of both receptive and productive skills. This aligns with research on the benefits of project-based learning for promoting both comprehension and production skills (e.g., [Stoller, 2002]). Learners not only practice recognizing idioms but also actively utilize them in presentations, games, or stories, potentially solidifying their ability to use them accurately in their communication, as supported by [Winn & Snyder, 1996] on the power of output processing for language learning.

The study provides valuable insights into effective methods for enhancing Iranian EFL learners' grasp of idioms. However, the study goes beyond replicating previous findings by directly comparing these two approaches. This unique contribution paves the way for further research exploring how PBL and DWT can be optimized and combined with other strategies to cater to learner preferences, cognitive factors, and long-term retention goals. By delving deeper into these areas, educators can equip Iranian EFL learners with a robust understanding of idioms, enabling them to express themselves with greater fluency and nuance in English.

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